

WHAT IS CLAIMED IS:

1. A process of fabricating a circuit board, comprising:

(a) providing a core layer, a first dielectric layer, and a second dielectric layer, said first dielectric layer including at least a first conducting column passing through
5 said first dielectric layer, said second dielectric layer including at least a second conducting column passing through said second dielectric layer;

(b) laminating said core layer, said first dielectric layer, and said second dielectric layer to form a laminating layer, said core layer being positioned between said first dielectric layer and said second dielectric layer;

10 (c) forming at least a first through hole passing through said laminating layer;

(d) filling said first through hole with a conducting material to form a third conducting column; and

(e) forming a first patterned conducting layer and a second patterned conducting layer on two sides of said laminating layer respectively.

15 2. The process of fabricating a circuit board of claim 1, wherein said core layer in step (a) includes a core conducting layer and at least a core dielectric column passing through said core conducting layer, and wherein said first through hole in step (c) passes through said core dielectric column.

20 3. The process of fabricating a circuit board of claim 1, wherein said core layer in step (a) includes a core dielectric layer, at least a core conducting column passing through said core dielectric layer, a third patterned conducting layer, and a fourth patterned conducting layer, said third patterned conducting layer and fourth patterned conducting layer being positioned on two sides of said core dielectric layer, and wherein said first through hole in step (c) passes through said core dielectric layer.

4. The process of fabricating a circuit board of claim 1, wherein step (a) further comprises providing an fifth conducting layer and an sixth conducting layer, wherein step (b) further comprises laminating said fifth conducting layer and said sixth conducting layer, said fifth conducting layer being laminated on said first dielectric layer, said sixth conducting layer being laminated on said second dielectric layer, and wherein step (c) further comprises patterning said fifth conducting layer and said sixth conducting layer.

5. The process of fabricating a circuit board of claim 1, further comprising:
(f) laminating a third dielectric layer on the one side of said laminating layer, said third dielectric layer including at least a fourth conducting column through said third dielectric layer;

(g) forming at least a second through hole passing through said laminating layer and said third dielectric layer; and

(h) filling said second through hole with conducting a material to form a fifth conducting column.

6. The process of fabricating a circuit board of claim 5, further comprising: (i) forming a patterned seventh conducting layer on said third dielectric layer.

7. A circuit board, including at least a laminated circuit board unit, said laminated circuit board unit at least including:

a core layer;

a first dielectric layer, laminated on the one side of said core layer, having at least a first conducting column passing through said first dielectric layer;

a second dielectric layer, laminated on the other side of said core layer, having at

least a second conducting column passing through said second dielectric layer;

a first conducting layer, laminated on said first dielectric layer, electrically connecting to said core layer via said first conducting column;

a second conducting layer, laminated on said second dielectric layer, electrically
5 connecting to said core layer via said second conducting column; and

at least a third conducting column passing through said first dielectric layer, said core layer, and said second dielectric layer, said third conducting column electrically connecting to said first conducting layer and said second conducting layer.

8. The circuit board of claim 7, wherein said first conducting layer is a
10 patterned conducting layer.

9. The circuit board of claim 7, wherein said second conducting layer is a patterned conducting layer.

10. The circuit board of claim 7, wherein said core layer includes a core conducting layer and at least a core dielectric column passing through said core
15 conducting layer.

11. The circuit board of claim 10, wherein said third conducting column passes through said core dielectric column in said core layer.

12. The circuit board of claim 7, wherein said core layer includes a core dielectric layer, at least a core conducting column, a third patterned conducting layer,
20 and a fourth patterned conducting layer, said core conducting column passing through said core dielectric layer, said third patterned conducting layer and said fourth patterned conducting layer being positioned on two sides of said core dielectric layer.

13. The circuit board of claim 12, wherein said third conducting column passes through said core dielectric layer.

14. The circuit board of claim 7, further comprising
at least a third dielectric layer laminated on the one side of said laminated circuit
board unit; and

at least a fourth conducting column passing through said third dielectric layer.

5 15. The circuit board of claim 14, further comprising a fifth patterned
conducting layer laminated on said third dielectric layer.

16. The circuit board of claim 14, further comprising a fifth conducting
column through said laminated circuit board unit and said third dielectric layer.